



**DOCUMENTATION ON THE CANNONS IN THE
GOVERNMENT MUSEUM
CHENNAI (MADRAS)**



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FRONT COVER

A model of the State Gun of Hyder-Ali and Tippu Sultan of Mysore. The swell of muzzle of the mounted gun is shaped like the conventional head of a lion. There are Urdu inscriptions on the stock of carriage on one side. The rest of the inscriptions on the stock are in English and runs thus- 'For Major John Mordaunt, Superintendent of the Gun Manufactory, Madras. M.H.A.

*This was Captured by His Excellency Lord General Mordaunt K.C.B. 1799
Hyder Ali and Tippos Sultan's State Gun.*

W L GAGE & CO
HIDDMINDON

Accession No 1889 (Anthropology: Government Museum, Chennai) Length 41.5 cms. Brass.

BACK COVER

'Old cannon representing the earliest known methods of making cannons. An inner lining of the wrought iron longitudinal bars arranged like the staves of a cask is strengthened externally and the bars kept in position by wrought iron rings.'

Serial Number 23

Accession Number: 1940 (Anthropology: Government Museum, Chennai)



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CHENNAI – 600 009.

FOREWORD

The Documentation on the Cannons in the Government Museum, Chennai, (Madras) with colour plates is the first effort of its kind. It is learnt that a similar effort is being made by the British Museum. The Indian army is also attempting to document Guns in its Artillery Regiment.

The book gives full information about the cannons in the collection of the Madras (Chennai) Museum. Nearly forty cannons are a very large number and would be among the largest collections in the World. These cannons were collected by the British during the course of the wars they fought in different parts of the Indian sub-continent and in Asia.

They were deposited in the Government Museum, Chennai. Some of these cannons have been lent on a long-term basis to the Archaeological Survey of India for display in the Fort Museum, Chennai and at Sri Ranga Patna. Details of location also are given in this book.

The authors have done exhaustive research by visiting the Officers Training Academy of the Indian Armed Forces at Madras, the Library of the Archaeological Survey of India and the Congremana Public Library.

I feel that the publication of this work which is on par with international standards in presenting full information, attention to detail and excellence of presentation, will enhance the prestige of Chennai Museum.

FORT ST. GEORGE,
CHENNAI – 600 009,
DATE 9-02-2000


(S. RAMAKRISHNAN, I.A.S.)

PREFACE

The history of the cannons in the Government Museum, Chennai (Madras) shows the extent and spread of the British Empire. These cannons have been collected in the battles the British fought in various parts of the Indian subcontinent and in Asia. Through these one can visualise the common thread of the paramount interest of maintaining Pax Britannica through out the world in the halcyon days of the British Empire.

Through out history superiority in the art of warfare has made the difference between survival and extinction of a people, their religion and culture.

In the First Battle of Panipat, (1526 AD), though Baber had a small army he possessed cannons which the Delhi Sultanate army did not. This meant the defeat of the huge Delhi Sultanate army at the hands of the Moghuls(Schalberg Lucille, 1991,p.159)

In 1750 AD, at the Battle of Wandiwash and in 1752 AD at Trichinopoly, the British cannons made a great difference between victory and defeat (Smith W A., 1984, p-464)

Most dramatically at the Battle of Plassey, (1757 AD), the British cannons enabled Lord Clive with a small band of English soldiers to rout the army of Nawab Siraj Ul Daula, though it was numerically much superior. The treachery of Mir Jafar, was of course, a major cause (Marshall P J., 1998, p-499)

The English East India Company realized the crucial role of cannons in maintaining their military superiority. Long distance fire from cannons resulted in huge enemy casualties while they themselves sustained light losses only. They also realised their importance in destroying the hitherto impregnable forts of the Indian rulers in Rajasthan and elsewhere. In Tanjore, cannons played a vital role in suppressing the Polygars. Marudha Pandiyar, Kattabomman and Puli Thevar had their forts moved to the ground due to the firepower of the Company's cannons (Rajayyan, Dr K, 1974,p-236)

They allowed the native Indian states to keep only the Six-Pounder cannons and the bigger Twelve and Twenty Pounder cannons were with the British. This ensured longer range and more destructive firepower for the East India Company's forces. This played a very significant role in the First War of Independence (1857) in enabling the subjugation of the native Indian princes (Martinson H,1857, p-179)

A combination of force of arms, subsidiary alliances and other not so savory tactics thus enabled them to subdue the entire country.

From the above, the role of cannons in moulding history can be easily deduced. In the Government Museum, Chennai some of the pieces from these historic wars are kept. There has been no documentation on these so far. In the following pages, this lacuna is attempted to be filled in.

DOCUMENTATION ON THE CANNONS IN THE GOVERNMENT MUSEUM CHENNAI (MADRAS)

ORIGIN OF CANNONS

Gunpowder invented in China was used for fireworks. Marco Polo took it to Europe where it was transformed into a weapon of war. The term Cannon is from the French "Canon" derived from the Latin "Canaa" meaning a road or tube.

Artillery has played a significant role in wars and conflicts that have marked the evolution of modern nations and states for the past 800 years. There is documentation from the early part of the fourteenth century on Chinese artillery. This weapon of war was first experimented during that period. Cannons of the period were crude, imperfect and never uniform and were also very heavy and were used as siege guns to shatter castle walls.

The first step toward the art of gunnery could have been the mobile cannon, which could move in the battlefield. Early manuscripts inform us that Seville was defended in 1347 AD by cannons throwing stones and that a cannon dated 1358 AD was preserved in the castle of Compy in France. It is learnt that at the beginning of the 14th century, the cannon was first made-up of circular bundles of iron bars surrounded by circular rings or hoops that were driven over the bars while red-hot and shrunk into their place as they cooled. They were called as 'barbards'. It took the name from Italian 'bambo et ardore' meaning thunder and lightning. It was called as Vogheless by the Dutch and Flammings (Powers P.W.1982.p.719).

One such early cannon is available in the Chennai Government Museum. It claims to be the first cannon of the Chinese Army. The fourteenth century may be accepted as the true beginning of the use of gunpowder and cannon in military affairs. Municipal and commercial records of the city of Ghent in Belgium describe cannon (Bussan) as being invented by a German monk in 1313AD and exported to England in 1314 AD with supplies of gunpowder. Another early name for cannon was 'Cerbotaia'(Powers P.W.1982.p.721).

SCIENCE OF GUNNERY

Niccolo Tartaglia, an Italian Mathematician in 1537 AD, published the first scientific treatise on gunnery. During the next 10 years, he invented the gannet "Quadrant" and demonstrated that cannon shot farthest when elevated to an angle of 45°. Luis Collado, a Spanish mathematician and engineer computed five tables, and recorded many of the firing techniques, that contributed towards a broader understanding of the elements of gunnery. It was in 1530 AD that the French invented the limber, a two-wheeled vehicle to which the gun trails were attached for transport. The front end of the limber, in turn, was attached by poles to the horses. Later, a two-wheeled ammunition carrier, the Carroon, was attached to the limber (Powers P.W.1982.p.722).

The second period [1600 AD – 1800 AD] opened with the significant contributions of the "father of modern warfare" the Swedish King and warrior Gustavus Adolphus [1594 – 1632 AD]. He made certain changes concerning the powder charge and projectile into a single cartridge. It superseded the old method of loading the powder into the cannon and increased the rate of fire. He used the lighter cannons as battalion pieces and the heavier ones as regimental weapons. By the seventeenth century the classes of cannon were clearly established in relation to their trajectories: flat trajectory or long range guns, high trajectory mortars for siege purposes, and the new "howitzer" whose trajectory was in between the first two. In 1693 AD, the wheel mounted field piece was developed and classified by the Dutch (Powers P.W.1982.p.723).

In the following pages the cannons in the collections of the Government Museum, Chennai are catalogued since it has not been done till now. Most of the cannons were made between 1602 and 1800 AD and were captured in historic wars. Sl.No. 10 and 12 are two copper cannons which were brought from China with inscriptions in Chinese which state that those were the first and second cannons that were placed at Amoy. The name of the foreman is also given as "Lai Mao Chou".

CATALOGUE OF THE CANNONS IN THE CHENNAI MUSEUM

Sl No	Photograph / Location	Accession No.	Dimensions & Metal	Description
1		1919 of Museum & 47 of ASI	Length 257.5 cm Gun Metal	<p>Old European cannon captured at Mandalay, during the III Burmese War [called Anglo-Burmese War] in 1885 AD. The British Government had begun aggression and ordered Gen. Prendergast to advance upon Mandalay. King Thibaw and his army surrendered at Mandalay on Nov 28, 1885 AD. This cannon was cast in Holland in 1602 AD and bears the coat of arms of the House of Orange and motto "E-M-MAINTENDRAY" [I will maintain].</p> <p>A Burmese inscription on the cannon states that it was taken at Dwaravati, Capital of Siam [Present Thailand] in 1128 [1766 AD] when this country was subjugated by Santhyayin, King of Burma.</p>
2		1918 of Museum & 46 of ASI	Length 293.5 cm Gun Metal	<p>Old European cannon captured at Mandalay, during the III Burmese War [called Anglo-Burmese War] in 1885 AD. The British Government had begun aggression and ordered Gen. Prendergast to advance upon Mandalay. King Thibaw and his army surrendered at Mandalay on Nov 28, 1885 AD. This cannon was cast in Holland in 1602 AD and bears the coat of arms of the House of Orange and motto "E-M-MAINTENDRAY" [I will maintain].</p> <p>A Burmese inscription on the cannon states that it was taken at Dwaravati, Capital of Siam [Present Thailand] in 1128 [1766 AD] when this country was subjugated by Santhyayin, King of Burma.</p>

3



Shifted to Fort Museum, Chennai
(Archaeological Survey of India)

1920 Length
of 361 cm
Musc
um & 43
of
ASI

Did cannon with a Persian inscription, which has been translated "This is a cannon of the Government Factory of Mir Murad Ali Khan Bahadur Mahabat Jung, 1244 A.H." (1828-1829 AD). He was one of the rulers of the Central portion of Sind in the Bombay Presidency. It is not known how this cannon came to Madras.

4



Shifted to Fort Museum, Chennai
(Archaeological Survey of India)

1921 Length
of 288.5 cm.
Musc
um & 44
of
ASI

Siamese cannon captured at Mandalay during the Third Burmese war in 1885 AD. A Burmese inscription on the cannon states that it was taken by Sanbyayun, King of Burma, at Dwenawadi, capital of Siam (Present Thailand), on the 8th March, 1766 AD. There are two Siamese inscriptions which state that it belonged to the great right division of the Siamese Body Guards of the King of Siam and that the casting was commenced, probably by Thut Sra, King of Siam, on the 10th April 1728 AD.

5



Shifted to Museum at Srirangapatna (A.S.I.)

1923 Length
of 77 cm
Musc
um & 28
of
ASI

Cannon captured during the operations against Tipu Sultan of Mysore. It is probably of French manufacture.

6



Shifted to Fort Museum, Chennai
(Archaeological Survey of India), located inside
Army Garrison, opposite to ASI office

1949 Length
of 175.5 cm
Muzzle Iron
iron

Cannon received with No 1938
from the Central Jail at
Trichinopoly. It is also believed
to have been taken from the
French by the English in the
place stated above. The
cascabel is intact in the case of
this cannon but the muzzle is
slightly injured.

7



Shifted to Fort Museum, Chennai
(Archaeological Survey of India)

1942 Length
of 188 cm
Muzzle Copper
iron & 39
of
ASI

Maratha cannon similar to
No 1941 with the same
inscription on it

8



Shifted to Fort Museum, Chennai
(Archaeological Survey of India)

1937 Length
of 141 cm
Muzzle iron
iron & 38
of
ASI

Old cannon found in the
Orthodoxy tank, Nizampet
division, Salem District. There
is the letter 'P' incised on it as
also the numbers '6-0-14'

9



Shifted to Fort Museum, Chennai
(Archaeological Survey of India)

1941 Length
of 186 cm
Muzzle Copper
iron & 79
of
ASI

Maratha cannon captured
during the Second Maratha
War, 1803-1804 A.D. The
Persian inscription on the
cannon has been translated -
"The cannon was made by
Aghasprand, at Bhavanger in
the year 1218 A.H. (1803-1804
A.D.) in memory of Sadar
Maharaj Dhanraj Ali Jha Aswant
Rao Holkar Subedar Bahadur
Narasimha Jung". This inscription
is in a brass medallion.

10



Shifted to Fort Museum, Chennai
(Archaeological Survey of India)

1934 Length
of 83.5 cm
Material
Iron
No. & 48
of ASI

Cannon with a brass plate on it with the following inscription "From Venla Fort, captured by General Campbell 1890 AD mounted by H. Macleod Esq, 1903."

11



Shifted to Fort Museum, Chennai
(Archaeological Survey of India)

1929 Length
of 157.5 cm
Material
Copper
No. & 34
of ASI

Copper cannon exactly similar to No 1927 with this difference in the inscription on it in Chinese that this is the "First Cannon placed at Arroy" while No 1927 is the "Second"

12



Shifted to Fort
Museum, Chennai
(Archaeological Survey of India)

1907 Length
of 149.5 cm
Material
Copper
No. & 33
of ASI

Copper cannon brought to Madras by troops who were engaged in the First China War in 1842 AD. It bears an inscription in Chinese which has been translated "In the fifth month of the 31st regnal year of Emperor Tao Kuang (corresponding to June 1841), Yen, the Viceroy of the Min-Chi province, and Lin, the Governor of Fuchien, made this cannon weighing 509 catties, which is the second cannon placed at Arroy, the Foreman being Lu Mao Chai".

13



Shifted to Fort Museum, Chennai
(Archaeological Survey of India)

1925 Length
of 116 cm
Material
Brass
No. & 27
of ASI

Brass cannon captured at the battle of Mithadpur, Indore State, Central India, where Holkar was defeated by Sir John Malcolm on the 19th December 1817 AD. Near the muzzle is inscribed in Telugu, 'Sri Venkateswara', a designation of Krishna.

14



Shifted to Fort Museum, Chennai
(Archaeological Survey of India)

1803 Length
of 186.5 cm
Muzzle
diam & 35
of ASI

Danish cannon bearing the
cypher of Christian VII, King
of Denmark. On the base ring
there is the inscription "7
FRIDRICKS WAERCK 7"

15



Shifted to Fort Museum, Chennai
(Archaeological Survey of India) located at
Army Garrison, opposite to ASI office

1838 Length
of 210 cm
Muzzle
diam

Cannon recovered from the
Central Jail at Trichanopoly and
believed to have been taken
from the French by the English
troops, Europeans and native,
commanded by Major Straup
Lawrence, on the 21st
September 1753 AD at the
Battle of the Sugar Loaf Rock.
The rock is designated by
Orissa is now known as the
Golden Rock. The trunnions of
the gun are not to be found and
a piece of the cascabel is
broken

16



Shifted to Fort Museum, Chennai
(Archaeological Survey of India)

1944 Length
of 300 cm
Muzzle
diam & 37
of ASI

Danish cannon made in 1787
AD. It was obtained when
Trichanopoly was ceded to
Britain in 1843. It bears the
cypher of Christian VII, King
of Denmark from 1766 to 1808
AD.

17



Shifted to Fort Museum, Chennai
(Archaeological Survey of India)

1945 Length
of 184 cm
Muzzle
diam & 36
of ASI

Danish cannon made in 1776
AD. It was obtained with
No 1946. It bears the cypher of
Christian VII

18



Arms Gallery,
Government Museum, Chennai

1922 Length
of 231 cm
Mater Gun metal
art

Old European cannon captured at Mandalay, during the Third Burmese War in 1885 AD. It bears the Coat of Arms of the House of Orange and the blunderbuss motto (warrior image) for "E MAINTIENDRAI" (I will maintain). A Burmese inscription on the cannon states that it was taken at Dacca, capital of Siam in 1128/1766 AD) when this country was subjugated by Santhyayon, King of Burma.

19



Arms Gallery,
Government Museum, Chennai

1924 Length
of 98.5 cm
Mater Gun metal
art

Dutch cannon with the monogram of the Dutch East India Company, V.O.C. for "Verenigde Oost Indische Compagnie" (United East India Company) inscribed by the letter 'A' for Amsterdam. The inscription "ME FECIT INSESTANTIDELDAM A 1785," states that the cannon was made at Amsterdam in 1785 AD.

20



Arms Gallery,
Government Museum, Chennai

1926 Length
of 126 cm
Mater Gun metal
art

Cannon with the mark of United East India Company. The inscription on the base ring states that this cannon was made by W. Kinnon in 1781 AD.

21



Reserve collection
Government Museum, Chennai

1928 Length
of 254 cm
Mater Brass
art

Brass loading cannon with the mark of the United East India Company. The inscription on the base ring states that this cannon was made by W. & F. Kinnon in 1786 AD.

22



Arms Gallery,
Government Museum, Chennai

1930 Length
of 152 cm
Mass Gun metal
art

Cannon captured during the operations against Tipu Sultan of Mysore. It is probably of French manufacture. Tipu Sultan was defeated on 4th May 1799 AD. The distinguishing mark on this cannon is the ornamental work on it including the figures of two heads of animals (dogs perhaps) on two rings. Sir Arthur Wellesley says "Our principal ally, the Nizam was restored to us, the French State growing in the Peninsula of India was destroyed. Our formidable native enemy Tipu, the ally of the French was subdued" (A selection from the Wellington despatches - Owen, S I, p 19)

23



Arms Gallery,
Government Museum, Chennai

1931 Length
of 115 cm
Mass Gun metal
art

Cannon captured during the battle of Meladpur, Indore state, Central India, where Holkar was defeated by Sir John Malcolm on 19th December 1817

24



Arms Gallery,
Government Museum, Chennai

1932 Length
of 104.5 cm
Mass Gun metal
art

Cannon captured during the operations against Tipu Sultan of Mysore. It is probably of French manufacture. Ornament - all chains are worked near the muzzle and the base and there are two heads of the lion worked on the two rings. Perhaps this is the one selected by the Superintendent of the museum from the Madras Arsenal in 1894 AD.

25



Arms Gallery,
Government Museum, Chennai

1933
Length
of 75 cm
Mass Gun metal
cm

Cannon captured during the operations against Tipu Sultan of Mysore. It is probably of French manufacture. This is similar to No.1923 in size and shape.

26



Reserve Collection
Government Museum, Chennai

1935
Length
of 154 cm.
Mass Gun metal
cm

A cannon shaped long barrel with an iron piece with an aperture projecting from the base. The following is inscribed on it - "Riviere, 121, Oxford Street, London".

27



Reserve Collection
Government Museum, Chennai

1936
Length
of 104.5 cm
Mass Iron
cm

Old cannon from Kurnool. It is shaped like a thick barrel with a smaller one projecting from it. Of the four iron rings on it, one is broken and missing. This is perhaps cannon from Kurnool mentioned in the list of arms.

28



Arms Gallery,
Government Museum, Chennai

1940
Length
of 272.5 cm
Mass Iron
cm

Old cannon representing the earliest known methods of making cannons. An inner lining of the wrought iron longitudinal bars arranged like the staves of a cask is strengthened externally and the bars kept in position by wrought iron rings.

29



Near Museum Theatre,
Government Museum, Chennai

1946 Length
of 338 cm
Muzzle Height
with
carriage
132.5 cm
Gun metal,
Manilla

Cannon mounted on a four wheeled carriage with the following inscribed on it: "This gun is believed to have been taken at Manila by Draper in the year 1762 AD" Close to this there is another inscription in very small letters and next to it the Royal Coat of Arms of Spain

30



Near Museum Theatre,
Government Museum, Chennai

1947 Length
of 303 cm
Muzzle Height
with
Carriage
117 cm

Cannon bearing the cypher of Christian VII of Denmark. It was made in 1787 AD. The following is inscribed on it: "This gun is believed to have been handed over by Denmark at the cession of Tranquebar in the year 1845 AD" The four-wheeled carriage on which the cannon is mounted bears the following inscription: "A. Broome Gun Foundry, Coimbatore 1831 AD"

31



Near Museum Theatre,
Government Museum, Chennai

1948 Length
of 394 cm
Muzzle Height
with
carriage
135 cm
Gun metal

Cannon mounted on four-wheeled carriage. This is similar to No 1946 in every respect. This is also believed to have been taken at Manila by Draper in 1762 AD

32



Near Museum Theatre,
Government Museum, Chennai

1949 Length
of 312.5 cm
Muzzle Height
with
carriage
138.5 cm
Gun metal

Cannon mounted on a four-wheeled carriage. The muzzle end of the cannon, the end of the cascabel and the ends of the trunnions are shaped like concentrated tiger heads. On it is inscribed the following: "This gun is believed to have been taken at the fall of Seringapatam in the year 1769" The carriage has the following inscription on its rim: "A. Broome Gun Foundry, Coimbatore 1831"

33



Near the Museum Theatre,
Government Museum, Chennai

1950
of
Museum

Length
303 cm.
Height
with
carriage
117 cm
Copper

Cannon mounted on a four-wheeled carriage. It bears the cypher of Christian VII of Denmark and was made in 1787. On it is inscribed the following - "This gun is believed to have been handed over by Denmark to the nation of Tranquebar in the year 1845".

34



Near the Old Congress Library Building,
Government Museum, Chennai

1951
of
Museum

284.5 cm
Gun metal
Burma

Cannon without carriage. It is decorated with design work all over. It is made of Gun metal but at the end of the cascabel there is a short and thick iron rod. There is an inscription in Burmese on the cannon.

35



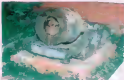
Near the Old Congress Library Building,
Government Museum, Chennai

1952
of
Museum

Length
193 cm
Iron

Cannon with a calibral shape at the base. There are transoms on either side.

36



Near the Old Congress Library Building,
Government Museum, Chennai

1954
of
Museum

Height
76 cm.
Length of
the stand
97.3 cm

Mortar mounted on a stand. It is very big and the mouth of the mortar is closed with a wooden cover.

37		1935 of Muse um.	Length 305 cm Gun metal.	Cannon without carriage. There is a ring near the cascabel
	Near the Old Conservators Library Building, Government Museum, Chennai			
38		1936 of Muse um	Length 327 cm Iron	Cannon similar to 1935. There is the British crown and G.R. The cypher of King George IV on it
	Near the Old Conservators Library Building, Government Museum, Chennai			
39		1957 of Muse um.	Length 333 cm Iron	Cannon similar to No. 1936 but without a ring near the cascabel
	Near the Old Conservators Library Building, Government Museum, Chennai			
40		2419 of Muse um	Length 357 cm Iron	Treasure-trove cannon from Vilupuram. It is made of iron. The centre mouth is 115 cm
	Near the Old Conservators Library Building, Government Museum, Chennai			

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Footscript

We noticed an inscription on the barrel of SI Nos. 29 & 31 (Accession Nos 1946 & 1948) as follows: "SUI MINISTERIO COMITIS DE SCHMELMANN". On the end-earrings P inscribed "JOHN STURGEON & CO, BOWLING, YORKSHIRE". This is not noted in the Accession Register prepared Circa 1920 AD.

